

Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1. (Withdrawn) A current source circuit comprising:
a plurality of current sources, each of which is configured to receive an external set signal and to control an output current value in response to the external set signal; and
a changing over means electrically connected to the plurality of current sources and a plurality of output lines,
wherein the changing over means selects one current source from the plurality of current sources for electrically connecting to each of the plurality of output lines.

2. (Withdrawn) A current source circuit comprising:
a plurality of pairs of current sources, each of which is configured to receive an external set signal and to control an output current value in response to the external set signal; and
a changing over means electrically connected to the plurality of pairs of current sources and a plurality of output lines,
wherein the changing over means selects one pair of current sources from the plurality of pairs of current sources for electrically connecting to each of the plurality of output lines.

3. (Withdrawn) A signal line driver circuit comprising:
a shift register;
first and second latch circuits electrically connected to the shift register;
a plurality of current sources, each of which is configured to receive a set signal and to control an output current value in response to the set signal; and
a changing over means electrically connected to the plurality of current sources and a plurality of signal lines,
wherein the changing over means selects one current source from the plurality of current sources for electrically connecting to each of the plurality of signal lines, and

wherein the set signal is an output of the shift register.

4. (Withdrawn) A signal line driver circuit comprising:

a shift register;

first and second latch circuits electrically connected to the shift register;

a plurality of current sources, each of which is configured to receive a set signal and to control an output current value in response to the set signal;

a changing over means electrically connected to the plurality of current sources and a plurality of signal lines; and

a switch provided between the changing over means and each of the plurality of current sources,

wherein the changing over means selects one current source from the plurality of current sources for electrically connecting to each of the plurality of signal lines,

wherein the set signal is an output of the shift register, and

wherein the switch is controlled by a signal from the second latch circuit.

5. (Withdrawn) A signal line driver circuit comprising:

a shift register;

first and second latch circuits electrically connected to the shift register;

a plurality of current sources, each of which is configured to receive a set signal and to control an output current value in response to the set signal;

a changing over means electrically connected to the plurality of current sources and a plurality of signal lines; and

a switch provided between the changing over means and each of the plurality of current sources,

wherein the changing over means selects one current source from the plurality of current sources for electrically connecting to each of the plurality of signal lines, and

wherein the set signal is set according to the second latch circuit.

6. (Withdrawn) A signal line driver circuit comprising:

a shift register;
first and second latch circuits electrically connected to the shift register;
a plurality of current sources, each of which is configured to receive a set signal and to control an output current value in response to the set signal;
a changing over means electrically connected to the plurality of current sources and a plurality of signal lines; and
a switch provided between the changing over means and each of the plurality of current sources,
wherein the changing over means selects one current source from the plurality of current sources for electrically connecting to each of the plurality of signal lines,
wherein the set signal is set according to the second latch circuit, and
wherein the switch is controlled by a signal from the second latch circuit.

7. (Withdrawn) A signal line driver circuit comprising:
first and second shift registers;
first and second latch circuits electrically connected to the first and second shift registers;
a plurality of current sources, each of which is configured to receive a set signal and to control an output current value in response to the set signal;
a changing over means electrically connected to the plurality of current sources and a plurality of signal lines,
wherein the changing over means selects one current source from the plurality of current sources for electrically connecting to each of the plurality of signal lines, and
wherein the set signal is an output of the first shift register.

8. (Withdrawn) A signal line driver circuit comprising:
first and second shift registers;
first and second latch circuits electrically connected to the first and second shift registers;
a plurality of current sources, each of which is configured to receive a set signal and to control an output current value in response to the set signal;

a changing over means electrically connected to the plurality of current sources and a plurality of signal lines; and

a switch provided between the changing over means and each of the plurality of current sources,

wherein the changing over means selects one current source from the plurality of current sources for electrically connecting to each of the plurality of signal lines,

wherein the set signal is an output of the first shift register, and

wherein the switch is controlled by a signal from the second latch circuit.

9. (Withdrawn) A signal line driver circuit comprising:

a shift register;

a first latch circuit, electrically connected to the shift register, comprising a plurality of first current sources, each of which is configured to receive a first set signal and to control an output current value in response to the first set signal;

a second latch circuit comprising a plurality of second current sources, each of which is configured to receive a second set signal and to control an output current value in response to the second set signal; and

a changing over means electrically connected to the plurality of first current sources, the plurality of second current sources and a plurality of signal lines;

wherein the changing over means selects one first current source from the plurality of first current sources and one second current source from the plurality of second current sources for electrically connecting to each of the plurality of signal lines,

wherein the first set signal is an output of the first shift register, and

wherein the second set signal is a current outputted from the selected first current source.

10. (Withdrawn) A signal line driver circuit comprising:

a shift register;

a first latch circuit, electrically connected to the shift register, comprising a plurality of first current sources, each of which is configured to receive a first set signal and to control an output current value in response to the first set signal;

a second latch circuit comprising a plurality of second current sources, each of which is configured to receive a second set signal and to control an output current value in response to the second set signal;

a changing over means electrically connected to the plurality of second current sources and a plurality of signal lines;

a first switch provided between each of the plurality of first current sources and each of the plurality of second current sources; and

a second switch provided between the changing over means and each of the second plurality of current sources,

wherein the changing over means selects one first current source from the plurality of first current sources and one second current source from the plurality of second current sources for electrically connecting to each of the plurality of signal lines,

wherein the first set signal is an output of the first shift register,

wherein the second set signal is a current outputted from the selected first current source, and

wherein the first and second switches are controlled by a signal from the second latch circuit.

11. (Currently Amended) A signal line driver circuit comprising:

a shift register;

a latch circuit, electrically connected to the shift register, comprising a plurality of pairs of current sources, each of which is configured to receive a set signal and a signal current, and to control an output current value ~~in response~~ corresponding to the set signal current; and

a changing over means circuit electrically connected to the plurality of pairs of current sources and a plurality of signal lines[;].

wherein the changing over ~~means~~ circuit selects one pair of current sources from the plurality of pairs of current sources for electrically connecting to each of the plurality of signal lines, and

wherein the set signal is an output of the shift register.

12. (Currently Amended) A signal line driver circuit comprising:
a shift register;
a latch circuit, electrically connected to the shift register, comprising:
a plurality of pairs of current sources, each of which is configured to receive a set signal and a signal current, and to control an output current value in response corresponding to the set signal current;
a first switch provided between the shift register and each of the plurality of pairs of current sources; and
~~a second switch provided between each of the plurality of pairs of current sources and the changing over means, and~~
a changing over ~~means~~ circuit electrically connected ~~to~~ between the plurality of pairs of current sources through the second switch and a plurality of signal lines[;],
wherein the changing over ~~means~~ circuit selects one pair of current sources from the plurality of pairs of current sources for electrically connecting to each of the plurality of signal lines,
wherein the set signal is an output of the shift register, and
wherein the first and second switches are controlled by a latch pulse.

13. (Withdrawn) The signal line driver circuit according to claim 3 characterized in that the changing over means comprises a plurality of analog switches, and that the current source is connected to the signal line through the analog switch.

14. (Withdrawn) The signal line driver circuit according to claim 3 characterized in that the changing over means comprises three analog switches for each of the signal line, and that the each of the three analog switches is connected to the different current sources.

15. (Withdrawn) The signal line driver circuit according to claim 3 characterized in that the changing over means comprises a group of analog switches formed by a plurality of analog switches and a group of current source circuit formed by a plurality of the current sources.

16. (Withdrawn) A light emitting device characterized in by comprising the signal line driver circuit according to claim 3.

17. (Withdrawn) A light emitting device characterized in by comprising two of the signal line driver circuit according to claim 3 and a pixel portion,

wherein the two signal line driver circuits have a function to input a difference of currents supplied from current sources of each to the pixel portion.

18. (Withdrawn) A light emitting device characterized in by comprising the signal line driver circuit according to claim 3 and a pixel portion,

wherein in the pixel portion, the signal line and a plurality of scan lines are aligned in matrix,

wherein a light emitting element is disposed at an intersection of the signal line and the scan line, and

wherein a transistor for switching which controls a current from the signal line and a transistor for controlling current which controls a current to be supplied to the light emitting element are provided.

19-26. (Canceled)

27. (Withdrawn) The signal line driver circuit according to claim 4 characterized in that the changing over means comprises a plurality of analog switches, and that the current source is connected to the signal line through the analog switch.

28. (Withdrawn) The signal line driver circuit according to claim 5 characterized in that the changing over means comprises a plurality of analog switches, and that the current source is connected to the signal line through the analog switch.

29. (Withdrawn) The signal line driver circuit according to claim 6 characterized in that the changing over means comprises a plurality of analog switches, and that the current source is connected to the signal line through the analog switch.

30. (Withdrawn) The signal line driver circuit according to claim 7 characterized in that the changing over means comprises a plurality of analog switches, and that the current source is connected to the signal line through the analog switch.

31. (Withdrawn) The signal line driver circuit according to claim 8 characterized in that the changing over means comprises a plurality of analog switches, and that the current source is connected to the signal line through the analog switch.

32. (Withdrawn) The signal line driver circuit according to claim 9 characterized in that the changing over means comprises a plurality of analog switches, and that the current source is connected to the signal line through the analog switch.

33. (Withdrawn) The signal line driver circuit according to claim 10 characterized in that the changing over means comprises a plurality of analog switches, and that the current source is connected to the signal line through the analog switch.

34. (Withdrawn) The signal line driver circuit according to claim 11 characterized in that the changing over means comprises a plurality of analog switches, and that the current source is connected to the signal line through the analog switch.

35. (Withdrawn) The signal line driver circuit according to claim 12 characterized in that the changing over means comprises a plurality of analog switches, and that the current source is connected to the signal line through the analog switch.

36. (Withdrawn) The signal line driver circuit according to claim 4 characterized in that the changing over means comprises three analog switches for each of the signal line, and

that the each of the three analog switches is connected to the different current sources.

37. (Withdrawn) The signal line driver circuit according to claim 5 characterized in that the changing over means comprises three analog switches for each of the signal line, and that the each of the three analog switches is connected to the different current sources.

38. (Withdrawn) The signal line driver circuit according to claim 6 characterized in that the changing over means comprises three analog switches for each of the signal line, and that the each of the three analog switches is connected to the different current sources.

39. (Withdrawn) The signal line driver circuit according to claim 7 characterized in that the changing over means comprises three analog switches for each of the signal line, and that the each of the three analog switches is connected to the different current sources.

40. (Withdrawn) The signal line driver circuit according to claim 8 characterized in that the changing over means comprises three analog switches for each of the signal line, and that the each of the three analog switches is connected to the different current sources.

41. (Withdrawn) The signal line driver circuit according to claim 9 characterized in that the changing over means comprises three analog switches for each of the signal line, and that the each of the three analog switches is connected to the different current sources.

42. (Withdrawn) The signal line driver circuit according to claim 10 characterized in that the changing over means comprises three analog switches for each of the signal line, and that the each of the three analog switches is connected to the different current sources.

43. (Withdrawn) The signal line driver circuit according to claim 11 characterized in that the changing over means comprises three analog switches for each of the signal line, and that the each of the three analog switches is connected to the different current sources.

44. (Withdrawn) The signal line driver circuit according to claim 12 characterized in that the changing over means comprises three analog switches for each of the signal line, and that the each of the three analog switches is connected to the different current sources.

45. (Withdrawn) The signal line driver circuit according to claim 4 characterized in that the changing over means comprises a group of analog switches formed by a plurality of analog switches and a group of current source circuit formed by a plurality of the current sources.

46. (Withdrawn) The signal line driver circuit according to claim 5 characterized in that the changing over means comprises a group of analog switches formed by a plurality of analog switches and a group of current source circuit formed by a plurality of the current sources.

47. (Withdrawn) The signal line driver circuit according to claim 6 characterized in that the changing over means comprises a group of analog switches formed by a plurality of analog switches and a group of current source circuit formed by a plurality of the current sources.

48. (Withdrawn) The signal line driver circuit according to claim 7 characterized in that the changing over means comprises a group of analog switches formed by a plurality of analog switches and a group of current source circuit formed by a plurality of the current sources.

49. (Withdrawn) The signal line driver circuit according to claim 8 characterized in that the changing over means comprises a group of analog switches formed by a plurality of analog switches and a group of current source circuit formed by a plurality of the current sources.

50. (Withdrawn) The signal line driver circuit according to claim 9 characterized in that the changing over means comprises a group of analog switches formed by a plurality of analog switches and a group of current source circuit formed by a plurality of the current sources.

51. (Withdrawn) The signal line driver circuit according to claim 10 characterized in that the changing over means comprises a group of analog switches formed by a plurality of analog switches and a group of current source circuit formed by a plurality of the current sources.

52. (Withdrawn) The signal line driver circuit according to claim 11 characterized in that the changing over means comprises a group of analog switches formed by a plurality of analog switches and a group of current source circuit formed by a plurality of the current sources.

53. (Withdrawn) The signal line driver circuit according to claim 12 characterized in that the changing over means comprises a group of analog switches formed by a plurality of analog switches and a group of current source circuit formed by a plurality of the current sources.

54. (Withdrawn) A light emitting device characterized in by comprising the signal line driver circuit according to claim 4.

55. (Withdrawn) A light emitting device characterized in by comprising the signal line driver circuit according to claim 5.

56. (Withdrawn) A light emitting device characterized in by comprising the signal line driver circuit according to claim 6.

57. (Withdrawn) A light emitting device characterized in by comprising the signal line driver circuit according to claim 7.

58. (Withdrawn) A light emitting device characterized in by comprising the signal line driver circuit according to claim 8.

59. (Withdrawn) A light emitting device characterized in by comprising the signal line driver circuit according to claim 9.

60. (Withdrawn) A light emitting device characterized in by comprising the signal line driver circuit according to claim 10.

61. (Withdrawn) A light emitting device characterized in by comprising the signal line driver circuit according to claim 11.

62. (Withdrawn) A light emitting device characterized in by comprising the signal line driver circuit according to claim 12.

63. (Withdrawn) A light emitting device characterized in by comprising two of the signal line driver circuit according to claim 4 and a pixel portion,

wherein the two signal line driver circuits have a function to input a difference of currents supplied from current sources of each to the pixel portion.

64. (Withdrawn) A light emitting device characterized in by comprising two of the signal line driver circuit according to claim 5 and a pixel portion,

wherein the two signal line driver circuits have a function to input a difference of currents supplied from current sources of each to the pixel portion.

65. (Withdrawn) A light emitting device characterized in by comprising two of the signal line driver circuit according to claim 6 and a pixel portion,

wherein the two signal line driver circuits have a function to input a difference of currents supplied from current sources of each to the pixel portion.

66. (Withdrawn) A light emitting device characterized in by comprising two of the signal line driver circuit according to claim 7 and a pixel portion,

wherein the two signal line driver circuits have a function to input a difference of currents supplied from current sources of each to the pixel portion.

67. (Withdrawn) A light emitting device characterized in by comprising two of the signal line driver circuit according to claim 8 and a pixel portion,

wherein the two signal line driver circuits have a function to input a difference of currents supplied from current sources of each to the pixel portion.

68. (Withdrawn) A light emitting device characterized in by comprising two of the signal line driver circuit according to claim 9 and a pixel portion,

wherein the two signal line driver circuits have a function to input a difference of currents supplied from current sources of each to the pixel portion.

69. (Withdrawn) A light emitting device characterized in by comprising two of the signal line driver circuit according to claim 10 and a pixel portion,

wherein the two signal line driver circuits have a function to input a difference of currents supplied from current sources of each to the pixel portion.

70. (Withdrawn) A light emitting device characterized in by comprising two of the signal line driver circuit according to claim 11 and a pixel portion,

wherein the two signal line driver circuits have a function to input a difference of currents supplied from current sources of each to the pixel portion.

71. (Withdrawn) A light emitting device characterized in by comprising two of the signal line driver circuit according to claim 12 and a pixel portion,

wherein the two signal line driver circuits have a function to input a difference of currents supplied from current sources of each to the pixel portion.

72. (Withdrawn) A light emitting device characterized in by comprising the signal line driver circuit according to claim 4 and a pixel portion,

wherein in the pixel portion, the signal line and a plurality of scan lines are aligned in matrix,

wherein a light emitting element is disposed at an intersection of the signal line and the scan line, and

wherein a transistor for switching which controls a current from the signal line and a transistor for controlling current which controls a current to be supplied to the light emitting element are provided.

73. (Withdrawn) A light emitting device characterized in by comprising the signal line driver circuit according to claim 5 and a pixel portion,

wherein in the pixel portion, the signal line and a plurality of scan lines are aligned in matrix,

wherein a light emitting element is disposed at an intersection of the signal line and the scan line, and

wherein a transistor for switching which controls a current from the signal line and a transistor for controlling current which controls a current to be supplied to the light emitting element are provided.

74. (Withdrawn) A light emitting device characterized in by comprising the signal line driver circuit according to claim 6 and a pixel portion,

wherein in the pixel portion, the signal line and a plurality of scan lines are aligned in matrix,

wherein a light emitting element is disposed at an intersection of the signal line and the scan line, and

wherein a transistor for switching which controls a current from the signal line and a transistor for controlling current which controls a current to be supplied to the light emitting element are provided.

75. (Withdrawn) A light emitting device characterized in by comprising the signal line driver circuit according to claim 7 and a pixel portion,

wherein in the pixel portion, the signal line and a plurality of scan lines are aligned in matrix,

wherein a light emitting element is disposed at an intersection of the signal line and the scan line, and

wherein a transistor for switching which controls a current from the signal line and a transistor for controlling current which controls a current to be supplied to the light emitting element are provided.

76. (Withdrawn) A light emitting device characterized in by comprising the signal line driver circuit according to claim 9 and a pixel portion,

wherein in the pixel portion, the signal line and a plurality of scan lines are aligned in matrix,

wherein a light emitting element is disposed at an intersection of the signal line and the scan line, and

wherein a transistor for switching which controls a current from the signal line and a transistor for controlling current which controls a current to be supplied to the light emitting element are provided.

77. (Withdrawn) A light emitting device characterized in by comprising the signal line driver circuit according to claim 10 and a pixel portion,

wherein in the pixel portion, the signal line and a plurality of scan lines are aligned in matrix,

wherein a light emitting element is disposed at an intersection of the signal line and the scan line, and

wherein a transistor for switching which controls a current from the signal line and a transistor for controlling current which controls a current to be supplied to the light emitting element are provided.

78. (Withdrawn) A light emitting device characterized in by comprising the signal line driver circuit according to claim 11 and a pixel portion,

wherein in the pixel portion, the signal line and a plurality of scan lines are aligned in matrix,

wherein a light emitting element is disposed at an intersection of the signal line and the scan line, and

wherein a transistor for switching which controls a current from the signal line and a transistor for controlling current which controls a current to be supplied to the light emitting element are provided.

79. (Canceled)

80. (Withdrawn) A light emitting device characterized in by comprising the signal line driver circuit according to claim 12 and a pixel portion,

wherein in the pixel portion, the signal line and a plurality of scan lines are aligned in matrix,

wherein a light emitting element is disposed at an intersection of the signal line and the scan line, and

wherein a transistor for switching which controls a current from the signal line and a transistor for controlling current which controls a current to be supplied to the light emitting element are provided.

81. (New) A signal line driver circuit comprising:

a plurality of current source circuits, each of which is supplied a first current and supplies a second current corresponding to the first current;

a plurality of signal lines; and

a selector circuit electrically connected between the plurality of current source circuits and the plurality of signal lines, the selector circuit selecting one of the plurality of signal lines to which the second current is supplied.